

St. Louis County, Missouri, 2017-2021

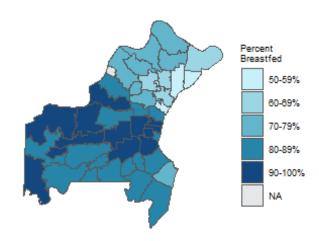
July 2023

Breastfeeding offers numerous health benefits – both long- and short-term – to the mother and infant. Infants who are breastfed have lower rates of asthma, type 1 diabetes, diarrhea, and sudden infant death syndrome (SIDS). For mothers, breastfeeding is associated with lower risk of breast and ovarian cancer, type 2 diabetes, and high blood pressure. The U.S. Dietary Guidelines for Americans and the American Academy of Pediatrics recommend exclusive breastfeeding for all infants until six months. ^{2,3}

On average, 79% percent of infants in St. Louis County had mothers who initiated breastfeeding before hospital discharge from 2017 to 2021. A slightly lower proportion of infants were breastfed statewide at 78% in 2019. Both Missouri and St. Louis County lag behind the national average of 83% of infants having ever been breastfed.⁴

Map 1. Percent of infants breastfed by ZIP code, 2017-2021

- The percentage of infants who were breastfed was highest among those born to mothers living in the West and Central St. Louis County regions; 90% of infants in the West and 89% of infants in the Central region initiated breastfeeding upon hospital discharge.
- Breastfeeding was lowest in the Inner North region with 65% of infants breastfeeding at discharge, followed by the Outer North and South regions with 74% and 83% of infants breastfeeding, respectively.
- There were 5 ZIP codes where fewer than 60% of infants initiated breastfeeding, all located in the Inner and Outer North regions: 63120, 63133, 63136, 63137, 63140



Source: Missouri DHSS, Bureau of Vital Statistics

• In thirteen ZIP codes, primarily located in the West and Central regions, more than 90% of infants initiated breastfeeding.

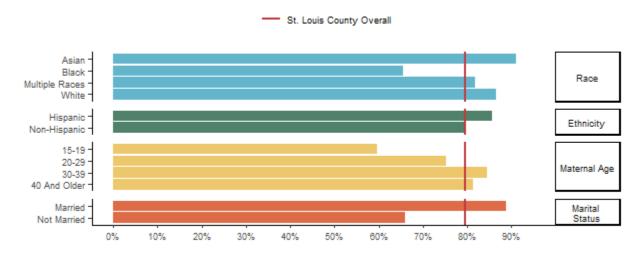
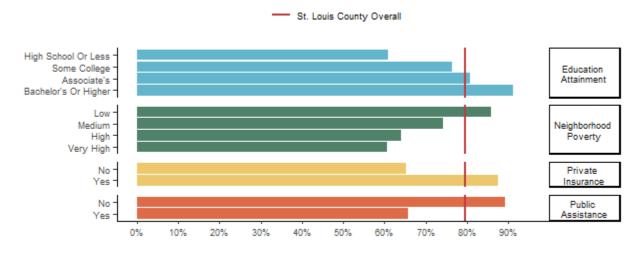


Figure 1. Percent of infants breastfed by maternal characteristics, 2017-2021

Source: Missouri DHSS, Bureau of Vital Statistics

- Rates of breastfeeding were highest among infants born to Asian mothers at 91%, followed by those born to White and mixed-race mothers with rates of 86% and 82%, respectively.
 Breastfeeding was lowest among infants born to Black mothers, with 66% breastfed at discharge. This is 17% lower than the St. Louis County average.
- Infants born to Hispanic mothers were 1.08 times as likely to be breastfed as infants born to non-Hispanic mothers.
- The percentage of infants who were breastfed increased as maternal age approached 40 and decreased slightly among mothers over 40. Infants born to mothers in their 30s and 40s were most likely to be breastfed, whereas infants born to teen mothers and mothers in their 20s were 25% and 6% less likely than average to be breastfed, respectively.
- The percentage of infants breastfed was 34% higher among mothers who were married compared to mothers who were not married.

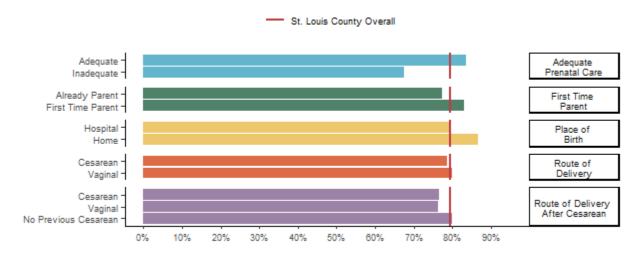
Figure 2. Percent of infants breastfed by socioeconomic status, 2017-2021



Source: Missouri DHSS, Bureau of Vital Statistics

- Higher levels of breastfeeding at discharge were associated with the mother's educational attainment. Infants born to mothers with a high school diploma or less were least likely to be breastfed, and 33% less likely than infants born to mothers with a bachelor's degree or higher.
- Breastfeeding initiation was highest in low-poverty neighborhoods. Infants born to mothers living in low-poverty neighborhoods were 16%, 34%, and 41% more likely to be breastfed compared to infants living in medium, high, and very high-poverty neighborhoods.
- Infants born to mothers with private insurance were 1.34 times as likely to have been breastfed as those without private insurance.
- Infants born to mothers who did not receive public assistance were 1.35 times as likely to have been breastfed as those who did receive public assistance.

Figure 3. Percent of infants breastfed by birthing factors, 2017-2021



Source: Missouri DHSS, Bureau of Vital Statistics

- Two-thirds of infants born to mothers who received inadequate prenatal care were breastfed at discharge – 15% lower than the St. Louis County average and 19% lower than infants born to mothers who received adequate prenatal care.
- Infants born to first-time mothers were more likely to be breastfed compared to infants born to mothers with older children; 83% of infants born to first-time mothers were breastfed, compared to 77% of those born to mothers who already had children.
- Compared to infants born in a hospital, infants born at home were 9% more likely to be breastfed. While breastfeeding is generally reported upon discharge from the hospital, record of breastfeeding among infants born at home is often reported by the assisting midwife.
- Among routes of delivery, infants born via cesarean section had the lowest rate of breastfeeding. However, rates were similar across all delivery methods; 79% of infants born via C-sections were breastfed, compared to approximately 80% of infants born vaginally.
- Infants born to mothers with a previous C-section were less likely than those without a previous C-section to be breastfed, regardless of route of delivery. Among infants born to mothers with a previous C-section, 76% of those born vaginally and 77% of those born via C-section were breastfed. For comparison, 80% of infants born to mothers without a previous C-section were breastfed.

Conclusion

Despite the benefits of breastfeeding, more than one in five St. Louis County infants had not initiated breastfeeding during the period covered in this report. Mothers often face multiple barriers to breastfeeding that contribute to the documented disparities across social and economic groups.

Lack of paid parental leave, inflexibility in the workplace (particularly among hourly wage workers), cultural norms that favor bottle feeding, and bias from health care providers make breastfeeding more difficult for some women.⁵ Such barriers have a disproportionate impact on Black and American Indian or Alaskan Native mothers, mothers with low socioeconomic status, and mothers with lower educational attainment.^{6,7} Racial bias in the health care setting is of particular concern, as hospitals are twice as likely to provide formula to Black women compared to White women.⁸ In addition, women may experience physical barriers such as sore nipples, leaking milk, pain, and difficulty latching on by the infant.⁹

Strategies to increase breastfeeding initiation include education-focused interventions, such as educational programs led by health care professionals and peer support groups led by trained volunteers, and hospital-based interventions, such as increasing maternal-infant skin-to-skin contact after delivery, initiating breastfeeding within an hour of birth, and reducing maternal-infant separation.^{10,11}

Baby-Friendly Hospitals

The Baby-Friendly Hospital Initiative was launched by the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) to work with hospitals in order to provide mothers the information, confidence, and skills necessary to initiate and continue breastfeeding their babies. ¹² Baby-Friendly® designated facilities are those that implemented the *Ten Steps to Successful Breastfeeding*, a set of evidence-based practices to promote breastfeeding imitation and increase breastfeeding duration. ¹³

In the St. Louis area, Barnes Jewish Hospital, SSM Health St. Mary's Hospital-St. Louis, SSM Health St. Clare Hospital-Fenton, and Alton Memorial Hospital are designated Baby-Friendly® hospitals.

Missouri "Show-Me 5" Hospital Initiative

The Missouri "Show-Me 5" Hospital Initiative promotes the adoption of five out ten steps from the Baby-Friendly Hospital Initiative. Although adoption of all ten steps is preferred, evidence suggests that the five steps included in the Missouri "Show-Me 5" Initiative are effective at assisting mothers in meeting their feeding goals.

Local "Show-Me 5" hospitals include Barnes Jewish Hospital and SSM Health St. Mary's Hospital-St. Louis.

Resources

Building Blocks of Missouri-St. Louis Region Nurse Family Partnership

Building Blocks of Missouri-St. Louis Region NFP connects specially trained nurses with first-time momsto-be early in pregnancy and continuing through the child's second birthday. Expectant mothers receive care and support throughout the pregnancy.

For more information, please visit: https://www.nursefamilypartnership.org/

Kangaroo Kids

Kangaroo Kids is committed to helping mothers, babies, and families meet their breastfeeding, pumping, or combination feeding goals by offering evidence-based information, compassionate support, and tips and tricks to overcome challenges during the breastfeeding experience. Their certified lactation counselors provide private counseling, group classes, and free weekly support groups for nursing moms.

For more information, please visit: https://kangarookidsonline.com/pages/breastfeeding-support

I AM: Breastfeeding

I AM: Breastfeeding seeks to revolutionize the image of breastfeeding while creating a village of support. They provide free services, including home visits, hospital visits, over-the-phone support, peer-to-peer support, professional support, and a diaper and hygiene pantry.

For more information, please visit: https://www.facebook.com/l.am.breastfeeding/

To contact I AM: Breastfeeding, call: (314) 400-8410

Jamaa Birth Village

The Jamaa Childbirth Empowerment & Education© class is centered on individual body awareness and building confidence and trust with your body and birth team. Jamaa has provided Black-led, culturally rooted and evidence-based sliding scale and free children birth education classes to the St. Louis Community since 2016. Their classes explore childbirth, breastfeeding, and life with a newborn to prepare for a healthy and safe birth and postpartum period.

For more information, please visit: https://jamaabirthvillage.org/childbirth-classes/

La Leche League of Missouri

La Leche League provides education, information, support, and encouragement to women who want to breastfeed. Women are invited to attend monthly group meetings or call a leader for breastfeeding help.

For more information, please visit: https://llli.org/la-leche-league-missouri/

Mercy Breastfeeding Classes

Mercy Hospital offers several breastfeeding resources, including outpatient lactation counselors to assist with breastfeeding issues at home, a Breastfeeding Basics class for before the baby is born, and Breastfeeding with Confidence support group for nursing mothers to meet informally with a registered nurse with specialized training in lactation support.

For more information, please visit: <a href="https://www.mercy.net/practice/mercy-birthplace-st-louis/mercy-birthplace-st-

To contact the Mercy Breastfeeding Information Line, call: (314) 251-6781

To sign up for Breastfeeding Basics, please register online or call: (314) 961-2229

MoBap Moms Breastfeeding Support Group

MoBap offers a Moms Breastfeeding Support Group for breastfeeding mothers and their babies to meet virtually or in-person in a relaxed and supportive setting. Led by an International Board-Certified Lactation Consultant, these sessions will boost confidence, increase understanding of breastfeeding challenges and solutions, and lend ongoing support to nursing mothers.

To register for upcoming Moms Breastfeeding Support Group meetings, please visit: https://classes-events.bjc.org/wlp2/classes/find

St. Louis Breastfeeding Coalition

The St. Louis Breastfeeding Coalition works collaboratively to connect, educate, and advocate breastfeeding in all St. Louis Communities. They provide access to local professionals and resources to assist in all aspects of infant nutrition.

For more information, please visit: https://stlbreastfeedingcoalition.org/

Missouri WIC

The Missouri WIC program provides supplemental food, health care referrals, nutrition education and breastfeeding promotion and support to eligible pregnant, breastfeeding, and postpartum women. In addition, WIC offers a Breastfeeding Support Line for afterhours support to WIC clients.

For more information about WIC, please visit: https://health.mo.gov/living/families/wic/

To contact the WIC Breastfeeding Support Line, call or text: (314) 299-4954

Additional Resources

For a comprehensive list of local breastfeeding resources, please visit: https://mobreastfeeding.org/resources/

Methods

Data were obtained from the Missouri Department of Health and Senior Services (DHSS), Bureau of Vital Statistics for the years 2017 to 2021. Records included all live births and were restricted to St. Louis County, Missouri residents by census tract. Each live birth received a separate entry; therefore, the rate of inflation of conditions affecting the mother due to multiple liveborn per pregnancy is expected to be 3-5% (approximately 3-5% of deliveries resulted in multiple live births). Percentages were calculated per total number of live births.

Suggested Citation

Hutti, E, Adams, C, Kelsey, D, Ward, E, Sandbothe, O, Weis, R, Wang, E. Breastfeeding Disparities, St. Louis County, Missouri, 2017-2021. Chronic Disease Epidemiology (CDE) Program Profile No. 15. St. Louis County, MO: Department of Public Health. July 2023

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